

Twenty-First Strategies

Twenty-First Strategies, LLC
6595 Terri Knoll Court
McLean, VA 22101

phone (703) 893-8333
fax (703) 893-8813
dklein@21st-strategies.com

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Mr. Mark Friedrichs
PI-40
Office of Policy and International Affairs
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585

By email: 1605bguidelines.comments@hq.doe.gov

Re: 10 CFR Part 300 Voluntary Greenhouse Gas Reporting; Interim Final Rules, 70 Fed. Reg. 15164 (March 24, 2005)

Dear Mr. Friedrichs:

Regarding the Department of Energy's Revised General Guidelines and draft Technical Guidelines for the §1605(b) Voluntary Reporting of Greenhouse Gases Program. 70 Fed. Reg. 15164 – 15192 (March 24, 2005), I wish to submit these comments for DOE's consideration.

Please note that although I have long worked on climate issues for DOE and other public and private sector clients, I am offering these comments to DOE as my own. It does not represent work performed on behalf of DOE or other clients.

In the following sections of this letter, I make five comments. These can be summarized as follows:

- An average 3.0 emissions rating may be a worthy goal for an inventory, but it does not need to be an absolute threshold. DOE can achieve all of its quality goals, and more, by publishing the associated inventory ratings and letting the forces of the marketplace determine whether lower-ranked inventories have merit and value.
- The definition of “engineered sequestration” needs to be broadened, by adding the phrase “or prevention of its release to the atmosphere” immediately following the words “Sequestration means the removal of atmospheric CO₂ (carbon dioxide)”.
- There is an inconsistency in the 10,000 ton threshold for defining large emitters vs. small emitters. While the guidelines generally state this threshold as 10,000 *metric* tons, there are a few instances in which 10,000 tons appears to mean *short* tons (2,000 lbs.).
- The financial conflict of interest requirement for verifiers fails to address a broader type of *business* conflict of interest. DOE should consider a broader restriction requiring verifiers to avoid financial ownership of reportable projects, and providing operational or support services for potentially reportable projects at other entities.
- DOE does not need to distinguish its ratings system as either ordinal or cardinal. As used in the inventory, it seems to be more cardinal than ordinal. At best, it could be argued that the system has elements of each. But no clarity seems to be provided by trying to make the distinction. It could simply be referred to as “a ratings system.”

Requiring a 3.0 or Higher Average Emissions Rating

In the section-by-section discussion of the General Guidelines, DOE discusses (at F.R.15179) the ratings system for emissions inventories. DOE writes that “The revised General Guidelines require the weighted average rating of all reported emissions and sequestration to be 3.0 or higher to qualify for registration. This provision reflects DOE’s belief that methods given an A or B rating are sufficiently accurate to serve as the basis for entity-wide reporting, while methods given a C or D rating should be used only for those gases or sources that represent a small share of the reporting entity’s total emissions.”

DOE’s proposal for an emissions rating system is in general an excellent idea, and one that will promote good practices and more credible estimates. In addition, a 3.0 weighted average rating appears to be a reasonable threshold for delineating “quality.” DOE should be commended for this innovation.

However, DOE’s use of a 3.0 threshold as a “pass” or “fail” benchmark is unnecessary, and would actually serve as a deterrent to a goal of continuous improvement. As presented, reporters will strive to reach a 3.0 average, but will not perceive any benefit from going above and beyond it. Indeed, to the extent that achieving higher ratings entails extra efforts and costs to the reporter, few reporters will choose to do so. DOE’s minimum threshold would also tend to become its ceiling.

As an alternative to the “command and control” nature of an arbitrary threshold, DOE has an opportunity here to introduce market forces and harness their power in encouraging reporters to increasingly do better. The benefits could be substantial in terms to improving inventory quality over time. This would also further the Administration’s goals of fostering voluntary trading programs. To achieve this, DOE would simply do the following:

- Provide for registration of *all* inventories that meet all other criteria for registration.
- Drop the 3.0 minimum threshold for registration, but make it clear that all registrations will carry with them their weighted average rating, however high or low that rating may be.
- Retain guidance on DOE’s *view* that 3.0 is a significant threshold for “quality”, and that DOE plans in its annual summaries to tabulate data on that subset of inventories that meet or exceed a 3.0 level.

With these simple steps, DOE will have converted a pass-fail test into a dynamic marketplace. A comparable situation is the bond market. There, AAA-rated bonds command a premium to A and B rated bonds, all of which are worth more than junk bonds. Similarly, a 3.5 emissions inventory rating will be perceived as more credible than a 3.0 rating, while a 1.0 rating would not be valued very much at all. If emissions trading should develop (voluntary or otherwise), or if efforts at environmental stewardship are other evaluated and compared, then DOE will have created a unique opportunity to observe how the marketplace values quality in emissions inventories, and can learn from this in future revisions of guidelines. Rather than requiring DOE to try to guess *a priori* what level of quality is appropriate, the inexorable forces of the marketplace can render a collective judgment.

Importantly, this approach provides a powerful incentive to reporters to continuously upgrade the quality of their inventories. Instead of sitting back with a “good enough” rating,

reporters would see value in the marketplace from taking actions that would enhance their overall emissions rating. DOE would not need to be overly concerned with low-quality inventories; the marketplace (bolstered by DOE's annual summaries indicating the most meritorious) would tend to weed out inferior efforts.

By presenting as guidance DOE's view that 3.0 is a significant threshold, rather than an absolute minimum, DOE provides flexibility for future changes as learning accumulates. And by summarizing only the "merit-worthy" subset of inventories, DOE can avoid an application of Gresham's Law, where inclusion of poor-quality inventories swells the totals, undermining overall quality and public confidence in the system.

Also, as others have pointed out, DOE cannot pre-judge what a future Congress may decide with respect to credit for voluntary actions. If, for example, it should be someday be decided that a 2.8 rating was sufficient, then DOE would not be able under its present system to provide information on emissions reductions between 2.8 and 3.0. However, with a full range of emissions inventory ratings in DOE's registry, and marketplace data on the value of higher quality, Congress would be in a position to make a better-informed decision as to what actions may or may not receive credit for voluntary actions.

Engineered Sequestration

In the interim final General Guidelines, at F.R. 15183, §300.2 defines "sequestration" as follows: "Sequestration means the removal of atmospheric CO₂ (carbon dioxide), either through biologic processes or physical processes, including capture, long-term separation, isolation, or removal of greenhouse gases from the atmosphere, such as through cropping practices, forest and forest products management or injection into an underground reservoir."

As worded, this definition may not properly cover the range of activities commonly associated with carbon capture and storage, particularly some of the activities described in the Draft Technical Guidelines as "engineered sequestration." Specifically, "removal of atmospheric CO₂" seems to imply that the CO₂ is *already* mixed with air. It is important to note that several types of carbon capture approaches are designed to capture the CO₂ *before* it is intermixed with the atmosphere; indeed, this is typically a far more efficient approach.

This potential ambiguity in the definitions can be remedied by simply adding to the definition the phrase "or prevention of its release to the atmosphere" immediately following the words "Sequestration means the removal of atmospheric CO₂ (carbon dioxide)".

Later, in the Draft Technical Guidelines, Chapter 1, Part G addresses "Engineered Sequestration". As used in the Guidelines, "engineered carbon sequestration" is also referred to as carbon capture, storage, and sequestration in underground reservoirs; or simply geologic sequestration. (These activities are distinguished from other forms of carbon sequestration including terrestrial sequestration, ocean storage, and conversion to solid materials.) On page 156, first bullet point, it is stated that "[t]he carbon dioxide must be captured from the source of emissions." Because it refers to the source of emissions and not the "removal of atmospheric CO₂" that General Guidelines define, this is less prone to misunderstanding. Still, DOE may wish to rephrase this to say that "[t]he carbon dioxide must be captured from the source of emissions, either during precombustion or from the flue gas prior to release into the ambient air."

Inconsistency in the 10,000 Ton Threshold for Defining Large Emitters

Generally, in discussions of large emitters vs. small emitters, the guidelines specifically use 10,000 *metric* tons of CO₂ equivalent as the threshold, below which the entity is a small emitter. However, this is not consistent throughout the text, as there are a few instances in which 10,000 tons could be construed to mean *short* tons of 2,000 pounds.

Here are the references to 10,000 tons in the draft Technical Guidelines, where the context would appear to suggest that *short* tons are indicated:

- page 281: “Large emitters: For the purpose of 1605(b) reporting, refers to 1605(b) participants who emit more than 10,000 tons of CO₂ equivalent in a single year or averaged over a multi-year period, determined at the time that the entity first reports.”
- page 284: “Small emitters: For the purposes of 1605(b) reporting, refers to participants whose operations emit 10,000 tons or less of CO₂ equivalent annually, determined at the time that the entity first reports and periodically thereafter.”

Here are the references to 10,000 tons in the Interim Final Guidelines, where the context would also appear to suggest that *short* tons are indicated:

- pages 12-13: “To register emission reductions, reporting entities with substantial emissions (average annual emissions of 10,000 or more tons of carbon dioxide (CO₂ equivalent) must provide an inventory of their total emissions and calculate the net reductions associated with entity-wide efforts to reduce emissions or sequester carbon. Entities with average annual emissions of less than 10,000 tons of CO₂ equivalent (small emitters) are eligible, under certain conditions, to register emission reductions associated with specific activities without completing an entity-wide inventory or entity-wide reduction assessment.”
- page 14: “Large Emitters (Avg. annual emissions \geq 10,000 tons CO₂e)”
- page 14: “Small Emitters (Avg. annual emissions \leq 10,000 tons CO₂e)”

To avoid confusion, DOE should be consistent in its nomenclature throughout, using *metric tons* or *tonnes* when the metric system is intended, and *short tons* when 2,000-lb. tons are intended.

Verifiers and Business Conflicts of Interest

Section 300.11 of the Interim Final Guidelines addresses independent verification of annual reports and the qualifications that verifiers must have. Paragraph 300.11(f) states that “An independent verifier may not be owned in whole or part by the reporting entity, nor may it provide any ongoing operational or support services to the entity, except services consistent with independent financial accounting or independent certification of compliance with government or private standards.”

While this requirement appears to address a financial conflict of interest between verifier and reporter, it fails to address a broader type of *business* conflict of interest. Suppose a verifier has ownership interest in another potentially reportable project, or provides operational or support services for a potentially reportable project owned by another entity. In either case, the

verifier would have a vested interest in the acceptance of a particular valuation methodology. Even though it may not have a financial interest directly in the reporter's project; it would have an interest in the outcome of its reporting. This creates a business conflict of interest, impairing the rendering of impartial judgment.

DOE should reconsider whether it is enough for verifiers to separate its activities on a client-by-client basis, as that does not eliminate business conflicts of interest. Rather, DOE should give consideration to a broader restriction that requires an independent verifier to avoid financial ownership of reportable projects, and to avoid providing operational or support services for a potentially reportable project owned by another entity.

Cardinal vs. Ordinal Emissions Rating System

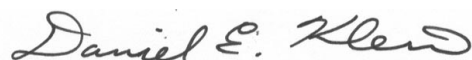
In the section-by-section discussion of the General Guidelines, DOE describes the emissions ratings system (at F.R.15179) as "an ordinal rating system in the sense that while an A rating is considered better than a B rating, and B is better than C, the rating system doesn't specify how much better A is than B. Similarly, two "A" rated methods for different sources may not be of comparable quality. Both will be the best method available for a given source, but they may vary in degree of accuracy, reliability, verifiability or cost."

While it may well be the case that two "A" rated methods for different sources are not of equal quality, it is also the case that the *effect* of the "A" rating is identical. One can easily argue that the rating system is very much a *cardinal* system, in that an "A" rating values an emissions source at exactly twice the value for a "C" rating, which in turn is exactly twice the value for a "D" rating." Similarly, if one has two different but equal-quantity emissions streams, each would provide an identical benefit to the overall inventory rating by moving from a "B" to an "A" rating. For a reporter who is trying to upgrade the overall rating for the entity's emissions inventory, the points assigned to the ratings provide a precise and quantitative means of evaluating the impact of a higher ranking on any component of the overall emissions.

DOE does not need to try to distinguish its ratings system as either ordinal or cardinal. As used in the inventory, it seems to be more cardinal than ordinal. At best, it could be argued that the system has elements of each. But importantly, no clarity seems to be provided by trying to make the distinction. It could simply be referred to as "a ratings system."

Thank you for this opportunity to participate in this important effort.

Sincerely,



Daniel E. Klein
President
Twenty-First Strategies, LLC